

**INDUCTION GENERATION SYSTEM AND METHOD****ABSTRACT OF THE DISCLOSURE**

5 An induction generator having one or more energy windings and one or more auxiliary windings where the auxiliary windings have fixed and switched capacitors which are used to control the induction generator output under variable load conditions. The auxiliary windings are electrically and magnetically isolated from the energy windings. The fixed capacitors are used under minimum load condition and the switched capacitors added in response to controls signals. The control signals are determined by analyzing the load voltage and current and the voltage across the particular capacitor being added. The induction generator is included in systems where the generator is rotationally driven by an engine and which couples the energy windings to a power grid and/or to a variable load. The engine may also employ a controller that receives the load current and voltage signals to determine engine speed.

10